ATTACHMENT F – MONITORING REQUIREMENTS AND MONITORING REPORTING

F1 GENERAL MONITORING REQUIREMENTS

This Attachment establishes monitoring requirements in accordance with federal and state laws and regulations, including:

1. Water Code sections 13267 and 13383 authorizing the State and Regional Water Boards to require dischargers to submit technical and monitoring reports, and
2. Clean Water Act section 308 and Code of Federal Regulations, title 40 (40 C.F.R.) section 122.41(j), requiring National Pollutant Discharge Elimination System (NPDES) permits to specify monitoring and reporting requirements.

The Department shall comply with all monitoring and reporting requirements in this Order and shall implement all monitoring in approved monitoring plans. The State Water Board Executive Director may amend the monitoring and reporting requirements in this Order as necessary.

Monitoring is defined as sampling, analysis, field tests, and observations used to evaluate pollutant concentrations in receiving water, stormwater runoff, and best management practice effectiveness for compliance with permit requirements. Monitoring may be performed by the Department or through the Department's participation in local and regional cooperative monitoring and through regional monitoring programs.

F2 MONITORING PLAN

The Monitoring Plan shall include the elements required by section F2 through F2.15 of this Attachment. The Monitoring Plan shall be submitted within 12 months of the Effective Date of this Order. Annual updates shall be submitted by November 30 of each year. The Department shall submit updates to the Monitoring Plan and annual updates for review and consideration of approval by State Water Board Executive Director.

The Monitoring Plan shall address the requirements of this Attachment. The Monitoring Plan shall include all proposed monitoring and a monitoring schedule for the upcoming fiscal year and the following fiscal year, including monitoring of applicable water body reaches in total maximum daily load (TMDL) watersheds where the Department is named as a responsible party where required through region-specific monitoring requirements or, where there are no region-specific monitoring requirements, as needed to demonstrate compliance with TMDLs in accordance with the Department's TMDL Compliance Plan. The Monitoring Plan and annual updates shall be implemented upon approval by the State Water Board Executive Director.

F2.1 Quality Assurance Program Plan

The Monitoring Plan shall include a Quality Assurance Project Plan modeled after the State Water Board Surface Water Ambient Monitoring Program's Quality Assurance Project Plan (2008) available at www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf. All monitoring samples shall be collected and analyzed according to the Department's Quality Assurance Project Plan, as approved by the State Water Board Executive Director.

F2.2 Representative Samples, Field Tests, And Monitoring Results

All monitoring samples and measurements shall be representative of the monitored volume and characteristics of the monitored discharge. The Department shall conduct field tests for pH, temperature, dissolved oxygen, and turbidity concurrently with each sample collected for analytical laboratory analysis.

This Order allows best management practice effectiveness monitoring results at select locations to be used as representative of the water quality of stormwater discharges from best management practices of the same type at other locations. Selection of representative best management practices effectiveness monitoring sites shall be based on existing and proposed best management practices.

F2.3 Analytical Methods for Laboratory Analysis

Monitoring, sampling, and analysis shall be conducted according to U.S. EPA-approved test procedures in 40 C.F.R. section 136 unless another method is required under 40 C.F.R. subchapters N or O. The Department shall assure samples are analyzed with U.S. EPA approved analytical methods that are sufficiently sensitive to detect and measure the pollutants at, or below, the applicable water quality criteria or waste load allocation, as specified below. Alternative methods that provide greater sensitivity may be used, subject to prior State Water Board Executive Director approval. Analytical methods are provided in Table F-1.

F2.4 Minimum Level and Method Detection Limits

The Department shall report, with each sample result, the minimum level and method detection limit as determined by the procedure in 40 C.F.R. section 136. The term "reporting limit" is synonymous with the term "minimum level." The Department shall report the sampling results using the following reporting protocols:

1. Sample results greater than or equal to the minimum level shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

2. Sample results less than the minimum level, but greater than or equal to the laboratory's method detection limit, shall be reported as "Detected, but Not Quantified." The estimated chemical concentration of the sample shall also be reported. For purposes of data collection, the laboratory shall write the estimated chemical concentration next to Detected, but Not Quantified.
3. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+/- a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers appropriate.
4. Sample results less than the laboratory's method detection limit shall be reported as Not Detected.
5. The Department shall instruct laboratories to establish calibration standards so that the minimum level value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

F2.5 Sufficiently Sensitive Analytical Methods

Monitoring shall be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. section 136 for the analysis of pollutants or pollutant parameters, or required under 40 C.F.R. subchapter N. For the purposes of this Order, a method is sufficiently sensitive when:

1. The method minimum level is at or below the level of the effluent limitation established in this Order for the measured pollutant or pollutant parameter, and either (a) the method minimum level is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter, or (b) the method minimum level is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
2. The method has the lowest minimum level of the analytical methods approved under 40 C.F.R. section 136 or required under 40 C.F.R subchapter N, for the measured pollutant or pollutant parameter.
3. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. section 136 or otherwise required under 40 C.F.R. subchapter N, monitoring shall be conducted according

to a test procedure specified in this Order or as approved by the State Water Board Executive Director. (40 C.F.R. sections 122.41(j)(4), and 122.44(i)(1)(iv).)

F2.6 Environmental Laboratory Accreditation Program Certification

All samples shall be analyzed by laboratories that are certified or accredited by Environmental Laboratory Accreditation Program, as required by Water Code section 13176 and Title 22, California Code of Regulations as detailed in State Board Resolution 2020-0012.[1] The Department shall ensure that the laboratory that receives samples for analysis holds a valid certificate of accreditation for the analytical test methods. All laboratory quality assurance/quality control records for the analyzed samples and resulting data shall be included with all submitted data reports.

F2.7 Sample Location Information

The Monitoring Plan shall include global positioning system coordinates for all monitoring sites in a consistent format, such as a decimal format. The global positioning system coordinates recorded shall be an accuracy of five decimal places and shall be collected and reported with all required monitoring reports.

F2.8 Monitoring Schedule and Type of Monitoring

The Monitoring Plan shall include a monitoring schedule that includes the type and category of monitoring (e.g., effectiveness, effluent, cooperative agreement, receiving water, etc.) and proposed sampling date, locations, parameters, watershed, and TMDL pollutant.

F2.9 Electronic Monitoring Data Reporting

All monitoring data shall be submitted electronically in the Stormwater Multiple Application and Report Tracking System (SMARTS) as electronic Excel files by November 30 of each year. The format of the file shall be in accordance with the State Water Board's California Environmental Data Exchange Network data submission template available at http://www.ceden.org/ceden_datatemplates.shtml, including but not limited to:

[1] California Code of Regulations, title 22, sections 64801.00, 64802.00, 64802.05, 64802.10, 64802.15, 64802.20, 64802.25, 64803, 64805, 64806, 64807, 64808.00, 64808.05, 64808.10, 64808.15, 64809, 64810.00, 64810.05, 64810.10, 64811, 64812.00, 64812.05, 64813, 64814.00, 64814.05, 64814.10, 64815, 64816.00, 64816.05, 64816.10, 64817, 64819, 64821, 64823, 64825, 64827, and 64860.

1. The global positioning system sampling location coordinates to 5 decimal places.
2. Project Identification Number.
3. Site Identification Number.
4. Monitoring point Identification Number.
5. Type of sample (e.g., best management practice effluent, receiving water, best management practice influent, etc.).
6. Date and time of sample.
7. Storm events shall be tracked with the location, storm start date, storm end date, time, and duration of the storm.
8. Whenever a new State Water Board data system is developed to accept direct electronic entry or upload of field and analytical data to the SMARTS database, the Department shall use that new data system upon notification by the State Water Board Executive Director.

F2.10 Analytical Methods and Monitoring Parameters

The Department shall select the monitoring parameters based on the sample location and sampling purpose (e.g., right-of-way, runoff to Areas of Special Biological Significance, etc.). Analytical methods are listed in Table F-1, below. The State Water Board Executive Director may authorize revisions to the analytical methods listed in Table F-1, including when U.S. EPA updates any of the methods in 40 C.F.R. section 136.

F2.11 Receiving Water Monitoring

The Department's participation in regional monitoring programs or local, regional, and any other cooperative monitoring programs shall be described and included in the Monitoring Plan, annual updated Monitoring Plan, and in the annual monitoring results report. In lieu of participation in the regional monitoring programs or local, regional, or any other cooperative monitoring program, the Department may submit proposed monitoring for individual monitoring~~, as part of the Monitoring Plan~~.

F2.11.1 Cooperative Monitoring Programs with Local Agencies

In lieu of individual total maximum daily load (TMDL) monitoring, the Department may elect to work cooperatively with local agencies to maximize monitoring resources, as approved by the State Water Board Executive Director in coordination with the Executive Officer of the applicable Regional Water Board. The Department's participation any cooperative monitoring programs shall be included and described.

F2.11.2 Cooperative Water Quality Monitoring Programs

The Department's participation in any cooperative water quality monitoring programs shall be described and included. The Department is encouraged to participate in existing and future cooperative water quality monitoring programs, which includes, but is not limited to, the following existing monitoring programs:

1. The Phase I Methylmercury Delta Regional Monitoring Program, within the Central Valley Regional Water Board jurisdiction.
2. The Klamath Basin Monitoring Program within the North Coast Regional Water Board jurisdiction.
3. The Central Coast Ambient Monitoring Program within the Central Coast Water Board jurisdiction.
4. The Central Valley Region Salts Monitoring Program within the Central Valley Regional Water Board jurisdiction.
5. Big Bear Lake - In-Lake Nutrient Monitoring Program and Watershed-Wide Nutrient Water Quality Monitoring Program.
6. Lake Elsinore and Canyon Lake TMDL Task Force.

F2.11.4 Regional Monitoring Programs for Total Maximum Daily Loads

The Department's participation in any Regional Monitoring Programs shall be described and included. The Department is encouraged to participate in approved regional monitoring programs that correlate with the monitored watershed and the Department's waste load allocation in that watershed, as approved by the State Water Board Executive Director in coordination with the applicable Regional Water Board Executive Officer.

F2.11.5 Coordinated Integrated Monitoring Programs

The Department's participation in coordinated integrated monitoring programs shall be described and included. Coordinated integrated monitoring program are agreements whereby multiple entities form unified monitoring programs for a watershed where there is a water quality benefit and advantage for integrated monitoring over self-monitoring.

F2.12 Region-Specific Total Maximum Daily Load Monitoring Requirements

The Department's region-specific monitoring shall be included and described. Region-specific monitoring includes selection of monitoring options, as described below.

F2.12.1 Monitoring Options for North Coast Water Board Sediment Total Maximum Daily Loads

The Department's monitoring for sediment in the North Coast Water Board region shall be described and included. For each sediment TMDL, the Department shall meet the North Coast Water Board sediment TMDL monitoring requirements by complying with one of the TMDL watershed monitoring options below..

1. The Department shall either a) allocate a one-time funding contribution equivalent to ten percent of each TMDL sediment reduction project cost to maintain existing watershed-based status and trends monitoring programs or b) the Department shall contribute funding proportionate to its share of waste load allocation among stakeholders for each TMDL sediment reduction project. Examples of watershed-based monitoring programs include the Klamath Basin Monitoring Program; or
2. The Department shall implement a watershed monitoring program associated with state highways within the North Coast region TMDL watersheds. State highways are broadly distributed and therefore the monitoring shall be watershed-based to allow North Coast Water Board staff to assess water quality impacts from state highways and progress toward achieving TMDL targets from the Department's implementation of TMDL sediment reduction projects. The watershed-based monitoring program shall include a number of monitoring locations and frequency of monitoring proportional to the Department's sediment load in excess of its load allocation for each TMDL watershed. The Department may consult with North Coast Water Board staff on development of a watershed-based monitoring program.

F2.12.2 Monitoring Options for San Francisco Bay Water Board Mercury and Polychlorinated Biphenyls Total Maximum Daily Loads

F2.12.2.1 Mercury Monitoring Options for the San Francisco Bay Water Board

The Department shall select a mercury monitoring option and shall implement the selected option. The options for mercury monitoring are as follows:

1. Regional Monitoring. Participate in mercury monitoring via the Regional Monitoring Program for Water Quality in San Francisco Bay. The Department's financial contribution shall be calculated in the same manner as that of other urban stormwater permittees; or
2. Self-Monitoring. Develop and implement a mercury monitoring plan to quantify the mercury loads or load reductions achieved through treatment, source control, and other management efforts. The Department's load reduction is 12.9 kilograms per year and mercury waste load allocation is 13.5 kilograms per year. . Bedded fine sediment shall be sampled a minimum of four wet weather events per year over the term of the Order. Sample

locations shall be at or near a point of discharge from the right-of-way and into the system that discharges stormwater into San Francisco Bay.

3. Combination. The Department may implement a combination of monitoring requirements in options1 or 2, above, provided that the combination provides equivalent monitoring.

F2.12.2.2 Polychlorinated Biphenyls Monitoring Options for the San Francisco Bay Water Board

The Department shall select and implement one of the following polychlorinated biphenyl monitoring options:

1. Regional Monitoring Program. Participate in the Regional Monitoring Program for Water Quality in San Francisco Bay. Participation shall be equivalent to other urban stormwater permittees participation; or
2. Self-Monitoring. Develop, submit, and implement a Department-specific monitoring plan to quantify polychlorinated biphenyls stormwater runoff loads and the load reductions achieved through treatment, source control and other actions. Bedded fine sediment shall be sampled a minimum of four wet weather events per year over the term of the Order. Sample locations shall be at/near a point of discharge from the right-of-way and into the conveyance system that discharges stormwater into San Francisco Bay. Monitoring shall be representative of pollutant concentrations or loadings in discharges from the Department's right-of-way or shall be representative of the effects of discharges from the Department's right-of-way on water qualities in the TMDL waterbodies.
3. Combination. The Department may implement a combination of monitoring requirements in options1 or 2, above, provided that the combination provides equivalent monitoring.

F2.12.3 Monitoring Options for Los Angeles Water Board Total Maximum Daily Loads

The Department shall comply with the Los Angeles Water Board monitoring requirements by selecting and implementing one of the following options.

1. Coordinated Integrated Monitoring. The Department may continue to participate in Coordinated Integrated Monitoring Programs for individual TMDL watersheds or participate in other watershed cooperative monitoring programs in lieu of self-monitoring; or
2. Self-Monitoring. The Department shall implement self-monitoring through development of a monitoring plan and schedule to monitor its rights-of-way. The monitoring plan shall be equivalent in methods, precision, accuracy, and quality to the (1) relevant Coordinated Integrated Monitoring Programs or other

watershed cooperative monitoring programs and (2) the monitoring requirements in this Attachment. The monitoring plan shall include a work plan and schedule to implement the monitoring. The watershed and TMDL shall be identified in the monitoring plan; or

3. Combination. The Department may implement a combination of requirements in F2.12.3, options1 or 2, above, provided that the combination is equivalent to the monitoring via watershed cooperative monitoring and right-of-way monitoring.

F2.12.4 Central Valley Water Board Total Maximum Daily Load Monitoring Requirements

For the Sacramento-San Joaquin Delta Methylmercury TMDL, the Department is approved to participate in the Central Valley Water Board approved Delta Regional Monitoring Program. If, in the event the Delta Regional Monitoring Program is no longer approved by the Central Valley Water Board Executive Officer, the monitoring below will be required upon notice.

1. Methylmercury Monitoring Plan – The Department shall submit a Methylmercury Monitoring Plan for Central Valley Water Board Executive Officer approval that assesses attainment with the TMDL allocations in stormwater discharges. The sampling locations, frequencies, and reporting may be the same as the requirements in this Order. The Department shall implement the monitoring plan within six months of the Central Valley Water Board Executive Officer approval. At a minimum, the Methylmercury Monitoring Plan shall include the following information:
   a. Management questions to be answered by the Methylmercury Monitoring Plan;
   b. Methylmercury loads and concentrations, turbidity, and other constituents to be monitored in storm water discharges, analytical methods, and reporting limits;
   c. Sampling sites' locations representative of the Department's service area, including latitude and longitude coordinates, water body name, and water body segment, if applicable;
   d. Frequency of monitoring;
   e. Other monitoring efforts that will provide supplemental data for the local water quality monitoring program and assessment (if any); and
   f. Proposed schedule and level of detail for monitoring reports. If a more comprehensive report is necessary every few years, the Monitoring Plan shall propose a schedule and description of the level of detail (consistent with the information described below) that will be included within the Annual Reports.

2. The Department must submit a Quality Assurance Project Plan with the Methylmercury Monitoring Plan to the Central Valley Water Board Executive Officer for review and approval. The Quality Assurance Project Plan must be consistent with the Surface Water Ambient Monitoring Project. All samples shall be collected and analyzed according to the Quality Assurance Project Plan. Monitoring Reports shall be submitted with the Annual Report and include the following information, consistent with the approved Monitoring Plan:

   a. The purpose of the monitoring, brief contextual background, and a brief description of the study design and rational;

   b. Methods used for sample collection: list methods used for sample collection, sample or data collection identification, collection date, and media if applicable;

   c. Identification of and rationale for any deviations from the Quality Assurance Project Plan;

   d. Results of data collection, including concentration detected, measurement units, reporting limits, and detection limits;

   e. Comparison to reference sites (if applicable), guidelines or targets;

   f. Discussion of whether data collected addresses the objectives or questions of study design; and

   g. Quantifiable discussion of program/study pollutant reduction effectiveness.

For the Clear Lake Nutrients TMDL, the Department shall implement turbidity monitoring for construction projects. For the Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch Mercury TMDL, the Department shall implement turbidity monitoring for construction projects.

F2.12.5 Lahontan Water Board Total Maximum Daily Load Monitoring Requirements

Within 60 day of the Effective Date of this Order, the Department shall either (a) report its demonstration of participation in the Lake Tahoe Regional Stormwater Monitoring Program at a participation contribution equivalent to other municipal jurisdictions in the Lake Tahoe region or (b) prepare and submit a Stormwater Monitoring Plan for review and consideration of approval to the State Water Board Executive Director in consultation with the Lahontan Water Board Executive Officer. If option (b) is selected, the Department's monitoring plan shall have the same monitoring parameters, locations, frequencies, and reporting as the Lake Tahoe Regional Stormwater Monitoring Program.

F2.12.6 Colorado River Total Maximum Daily Load Monitoring Requirements

For the Coachella Valley Stormwater Channel Bacterial Indicators TMDL, the Department shall monitor for Escherichia coli during a minimum of two qualifying

precipitation events per calendar year that result in a discharge and for a minimum of eight sampled events over four years, excluding years less than two qualifying precipitation events. The Department shall sample at the monitoring locations identified in the Department's "Monitoring and Reporting Project Plan and Quality Assurance Project Plan for 2-Year Bacteria Indicator Monitoring in Conformance with Phase I Implementation for the Coachella Valley Stormwater Channel Total Maximum Daily Load Riverside County, California" as approved by the Colorado Water Board on December 12, 2013. If the water quality objectives are not achieved by the end of Phase I monitoring, then Colorado River Water Board staff will implement additional actions to control pathogenic sources (i.e., the TMDL Phase II actions).

F2.12.7 San Diego Water Board Total Maximum Daily Load Monitoring Requirements

The Department's Monitoring Plan shall describe the plans for monitoring the following watersheds in the San Diego Water Board region:

F2.12.7.1 Project I – Twenty Beaches and Creeks Bacteria Monitoring

For indicator bacteria in the Project I – Twenty Beaches and Creeks TMDL, the Water Quality Plan for the San Diego Basin (Tables 7-41 through 7-43 for Wet Weather and Tables 7-45 through 7-47 for Dry Weather) states that the Department is currently in compliance with the wet and dry weather waste load allocations if mass loads from the Department's rights-of-way have not increased with time; this also means that existing mass loads from the Department's rights-of-way cannot increase over time. To monitor for compliance with the Project I – Twenty Beaches and Creeks Bacteria TMDL, the Department shall either participate in cooperative watershed monitoring or shall develop and implement a Department-specific monitoring plan as described in the two options listed below, according to the San Diego Basin Plan, page 7-96. The options are as follows:

1. Cooperative Watershed Monitoring. The Department may participate in a cooperative watershed monitoring program with the other responsible municipalities, as approved by the State Water Board Executive Director in consultation with the San Diego Water Board Executive Officer. The Department's participation shall be a proportional responsibility that is calculated in accordance with the Department's land use coverage in the watershed; or
2. Department-Specific Monitoring Program. The Department may conduct compliance monitoring to demonstrate the effectiveness of best management practices in controlling bacteria loads for this TMDL. For each of the twenty beaches and creeks watersheds, outfalls shall be monitored weekly during the dry season and a minimum of three rain events during one wet season. This monitoring shall occur once every five years per location. Sample

locations, number of samples, sampling time, methods, and frequencies shall be representative of pollutant concentrations or loadings in discharges from the Department's right-of-way or shall be representative of the effects of discharges from the Department's right-of-way on water qualities in the TMDL waterbodies.

F2.12.7.2 Chollas Creek Dissolved Copper, Lead, and Zinc

The TMDLs require monitoring and reports to assess the effectiveness of implemented best management practices to meet the waste load allocations. The Department shall perform monitoring by choosing and implementing one of following two options:

1. Cooperative Watershed Monitoring Program. The Department may participate in or contribute to a cooperative watershed monitoring program with the other responsible municipalities (i.e., cities of La Mesa, Lemon Grove, and San Diego; the Port of San Diego; and the County of San Diego), as approved by the State Water Board Executive Director in consultation with the San Diego Water Board Executive Officer. Monitoring shall demonstrate watershed compliance/non-compliance with the waste load allocations.; or
2. Self-Monitoring. The Department may develop and conduct compliance monitoring to demonstrate the effectiveness of best management practices to achieve waste load allocations. Receiving water shall be monitored monthly during the wet season for a minimum of three rain events per year. Monitoring shall be representative the effects of the Department's discharges on water quality.

F2.12.7.3 Los Penasquitos Lagoon Sediment Monitoring

For Los Penasquitos Lagoon sediment monitoring, the Department shall perform sediment monitoring by selecting and implementing one of the two options listed below:

1. Cooperative Watershed Monitoring. The Department may participate in or contribute to a cooperative watershed monitoring program with the other responsible parties, as reviewed for consideration of approval by the State Water Board Executive Director in consultation with the San Diego Water Board Executive Officer.; or
2. Self-Monitoring. The Department may develop and conduct compliance monitoring to demonstrate the effectiveness of best management practices and to demonstrate compliance with the load reduction. Receiving water monitoring shall be representative of pollutant concentrations or loadings from the Department's rights-of-way and outfalls and shall be representative of the effects of such discharges on water quality. Receiving water shall be monitored three times during wet weather and three times during dry weather

per permit cycle. Representative locations from the Department's outfalls shall be included. Sampling locations, number of samples, sampling time, methods, and frequencies shall be included in the monitoring plan.

F2.13 Runoff Characterization Monitoring for Selection of Best Management Practices

The Department shall describe its plans and procedures for runoff characterization monitoring. When performing runoff characterization monitoring, the Department shall obtain representative samples for analysis and field tests. The Department may use the results to assist in the selection of best management practices. The Department shall identify the locations, number, frequency, and parameters of all best management practice monitoring in its Monitoring Plan. The Department shall annually report updates to its best management practice selection monitoring.

F2.14 Best Management Practices Effectiveness Monitoring for Demonstration of Compliance with Total Maximum Daily Loads

When the Department uses best management practice effectiveness monitoring results to represent the quality of its stormwater discharges, the Department shall sample at an influent point into the best management practices and a discharge point out of the best management practices structure. Representative samples shall be obtained for data analysis and field tests.

Best management practice effectiveness monitoring is a measurement of the treatment effectiveness of a structural best management practice installed at a specific location. The Department shall, at minimum, include the following in its Monitoring Plan:

- Recommended representative sampling locations for effectiveness monitoring,
- Number of samples,
- Frequency of monitoring, and
- Monitoring parameters.

The Department shall provide a list of the discharge point locations that are representative of best management practices, a monitoring schedule, and an updated list of best management practice effective monitoring.

F2.15 Conditionally Exempt Non-Stormwater Discharge Monitoring

This Order allows certain types of non-stormwater discharges that are not considered to be sources of pollutants. However, if the State Water Board Executive Director determines that any category of allowed non-stormwater discharge is a source of pollutants, the State Water Board Executive Director may require the Department to conduct additional monitoring and submit a report on

such discharges. The State Water Board Executive Director may also order the Department to cease a non-stormwater discharge.

F3 ANNUAL MONITORING RESULTS REPORT

By November 30 of each year, the Department shall submit an Annual Monitoring Results Report that covers the period from July 1 of the prior year through June 30 of the current year, defined as the fiscal year. The Annual Monitoring Results Report shall include the following information:

1. All monitoring results, including from region-specific monitoring required in section F2.11 through F2.11.5 of this Attachment.
2. Description with accompanying tabulated summary of exceedances, including all information necessary to locate and identify the sample results in the Excel file (described below) and in the certified laboratory results.
3. Descriptive text of all monitoring results, including results from Areas of Biological Significance.
4. A list of all site locations with site identification numbers that were monitored during the reporting year, including the past fiscal year's monitoring activities, best management practices effectiveness monitoring, receiving water monitoring, and any other monitoring performed for the period by the Department.

Using the Stormwater Multiple Application and Report Tracking System (SMARTS) parameter entry field under requirements, the Department shall upload to SMARTS common data format files (Excel) containing certified laboratory analytical results, the laboratory and Department's sample identification numbers, sample locations and coordinates, reporting limits, method detection limits, minimum levels, laboratory qualifiers, and storm event identification numbers. The file shall comply with the requirements of Attachment F section F2.9. The California Environmental Data Exchange Network data entry template is the accepted format (click on the California Environmental Data Exchange Network submit data link for the template). The Excel file shall be uploaded to SMARTS.

1. Highlighted analytical and field test results that exceed applicable water quality standards, including toxicity objectives.
2. Certified laboratory reports as an appendix.
3. A summary of sites requiring corrective actions to achieve compliance with this Order, and a review of any iterative procedures (where applicable) at sites needing corrective actions.
4. Summary conclusion from any Regional Monitoring Program or cooperative monitoring program regarding whether the total maximum daily load watersheds comply with the waste load allocations.

F4 REPORTING DUE DATES

1. Within 12 months of the Effective Date of this Order, the Department shall submit a Monitoring Plan to the State Water Board Executive Director for review and consideration of approval. The Department's Monitoring Plan shall comply with the requirements of this Attachment.
2. Within 60 days of the Adoption Date of this Order, the Department shall either report its participation in the Lake Tahoe Regional Stormwater Monitoring Program or submit a Stormwater Monitoring Plan according to the requirements of section F2.12.4.
3. By November 30 of each year, the Department shall submit a summary of annual updates to its Monitoring Plan. The Department's annual updates shall comply with Attachment F of this Order.
4. By November 30 of each year, the Department shall submit an Annual Monitoring Results Report for the period from July 1 of the prior year through June 30 of the current year. The Monitoring Results Report shall include the information required in Attachment F of this Order.
5. Upon a determination by the Department that a discharge is exceeding a receiving water limitation, the Department shall provide notification in accordance with Attachment G, Incident Reporting.

A tabulated summary of report and plan due dates is provided in Attachment G.

Table F-1. Analytical Methods

Pollutant Type	Constituent	Analytical Method	Minimum Level (Note [1])	Units
Conventional Pollutant	Flow	Field Test (Note [2])	-	-
Conventional Pollutant	pH	Field Test (Note [3])	-	pH Units
Conventional Pollutant	Temperature	Field Test (Note [3])	-	Degrees centigrade
Conventional Pollutant	Turbidity	Field Test (Note [3])	-	Nephelometric turbidity units
Conventional Pollutant	Dissolved Oxygen	Field Test (Note [3])	-	Milligrams/liter
Conventional Pollutant	Hardness as calcium carbonate	Standard Method 2340 B or C	5	Milligrams/liter
Conventional Pollutant	Total Dissolved Solids	U.S. EPA 160.1	1	Milligrams/liter
Conventional Pollutant	Total Suspended Solids	U.S. EPA 160.2	1	Milligrams/liter
Hydrocarbons	Oil and Grease	U.S. EPA 1664B	1.4	Milligrams/liter
Hydrocarbons	Polycyclic Aromatic Hydrocarbons	U.S. EPA 8310	0.05	Micrograms/liter
Nutrients	Ammonia	U.S. EPA 350.1	0.2	Milligrams/liter
Nutrients	Total Kjeldahl Nitrogen	U.S. EPA 351.2	100	Micrograms/liter

Pollutant Type	Constituent	Analytical Method	Minimum Level (Note [1])	Units
Nutrients	Nitrate as Nitrogen	U.S. EPA 300.0/300.1	100	Micrograms/liter
Nutrients	Total Phosphorus	U.S. EPA 365.1	30	Micrograms/liter
Metals	Aluminum	U.S. EPA 200.8	25	Micrograms/liter
Metals	Chromium	U.S. EPA 200.8	1	Micrograms/liter
Metals	Copper	U.S. EPA 200.8	1	Micrograms/liter
Metals	Iron	U.S. EPA 200.8/200.7	1	Micrograms/liter
Metals	Lead	U.S. EPA 200.8	1	Micrograms/liter
Metals	Mercury	U.S. EPA 1631	0.2	Micrograms/liter
Metals	Zinc	U.S. EPA 200.8	5	Micrograms/liter
Metalloids	Selenium	U.S. EPA 200.8	0.5	Micrograms/liter
Microbiological	Fecal Coliform	Standard Method 9221 C, E	2	Most probable number/100 milliliters
Microbiological	Enterococcus	Enterolert®	2[4]	colony forming units /100 milliliters
Polychlorinated biphenyls	Aroclor	U.S. EPA 1668	50	Picograms/kilogram
Organochlorine Pesticides	Dichlorodiphenyltrichloroethane, Chlordane, Dieldrin, Toxaphene	U.S. EPA 1669	5	Picograms/liter

Pollutant Type	Constituent	Analytical Method	Minimum Level (Note [1])	Units
Water Column Toxicity	Chronic	U.S. EPA 821-R-02-013	Pass/Fail	-

Notes to Table F-1:

[1] The State Water Board prescribes that only "sufficiently sensitive" methods be used for analyses of pollutants or pollutant parameters under an NPDES permit. Minimum levels, synonymous with the term reporting limits, must be sufficiently sensitive to detect the effluent limitations, which includes a waste load allocation, or an objective/criterion in the applicable Regional Water Board Basin Plan, or the numeric effluent limitation or action level in this Order

[2] Flow measurements shall be estimated using a U.S. EPA flow estimating methods provided in U.S. EPA Water Flow Webpage or U.S. EPA Water Flow Measurement Tech Notes.

[3] Field instruments shall be calibrated and standardized according to the manufacturer's directions. The Department shall maintain this documentation and provide it to Water Board staff for review upon request.

[4] Only applicable for direct discharges to marine waters. See Order Attachment B for definitions.

[5] List of polycyclic aromatic hydrocarbons shall be the full list specified in U.S. EPA method 8310.

Legend:

pH = potential of hydrogen.